

REMARKS

Entry of the above amendment and reconsideration of the rejections based on the following remarks are respectfully requested.

Claims 1-4, 14, 37-39, 43 and 45 have been rejected under 35 U.S.C. § 103(a) as being obvious over U.S. 4,883,059 (Stedman et al.) in view of U.S. 4,108,165 (Kopp et al.). In order to further clarify that which Applicant claims as his invention, independent Claims 1 and 37 have been amended as described below.

Claim 1 has been amended to recite that the removably connectable parts of the needle guide device are engaged in a non-separable and non-sliding condition by a removable mutual mechanical locking means, and further that the elongated guide hole has rectangular sections dimensioned to contact a needle by way of needle-guiding surfaces tangent to the outer surface of the needle, in order to restrict transverse movement of the needle in the guide hole. This needle guide structure provides a secure fit around the needle, but contacts the needle at only a limited number of contact points which correspondingly provides a limited area of contact between the needle surface and the needle guide. By limiting the contact surface area, the corresponding friction between the needle and the needle guide is kept desirably very low, yet the ability to securely hold the needle in place is not compromised. Neither Stedman et al. nor Kopp et al. discloses or suggests such an arrangement. Both Stedman et al. and Kopp et al. show circular needle guide holes that do not provide the benefits of Claim 1. Moreover, Kopp et al. discloses that the guide hole is dimensioned to permit passage of tubing if desired, and that liners may be needed to provide an appropriate clearance and fit. Neither Stedman et al. nor Kopp et al. discloses or suggests an arrangement in which the shape and dimensioning of a needle guide

device is chosen to both provide a secure fit for the needle, yet maintain needle-to-needle guide friction as low as possible. Neither Stedman et al. nor Kopp et al. addresses the issue of such friction in the design and construction of a needle guide device. Claim 1 is therefore believed to patentably distinguish over Stedman et al. and Kopp et al.; the withdrawal of the Examiner's rejection and allowance of Claim 1 is respectfully requested.

Claims 2-17, dependent upon Claim 1, are also now believed to be allowable by virtue of Claim 1 being allowable.

Claim 37 has been amended to recite that the needle guide base has at least one shape mating extension which corresponds to a complementary shape mating structure on the outer surface of the ultrasound probe body in order to form a mutual interlocking structure. Neither Stedman et al. nor Kopp et al. discloses or suggests such an arrangement. The structure recited in amended Claim 37 creates a secure bond between the needle guide and the probe through an interlocking arrangement of parts. Stedman et al. discloses the presence of a guide to probe keying structure that appears to control rotational movement of the needle guide with respect to the probe, but retaining rings are required to fix the needle guide in position. The arrangement claimed in Claim 37 does not require a retaining ring as the needle guide and probe body form an interlocking structure between themselves that obviates the need for any additional retaining means. Claim 37 is therefore believed to be allowable over Stedman et al. and Kopp et al. Claims 38-45, dependent on Claim 37, are also believed to be allowable on the basis of Claim 37 being allowable.

In view of the foregoing amendment and remarks, Applicants respectfully submit that none of the cited references disclose or make obvious the claimed invention. Accordingly, reconsideration of the rejection is respectfully requested with a passage of this application to

allowance respectfully solicited. The Examiner is invited to telephone the undersigned attorney if there are any questions about this submission or other matters, which may be addressed in that fashion.

Respectfully submitted,

By. 

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